

A NEW SPECIES OF THE GENUS *ACORRRHINIUM* NOUALHIER FROM IRAN (HETEROPTERA, MIRIDAE, PHYLINEAE)

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Abstract One new species of the genus *Acorrhinium* Noualhier from Iran, *Acorrhinium rufimaculatum* sp. nov. is described and illustrated. The type specimen is deposited in the Institute of Entomology, Nankai University, Tianjin, China.

Key words Hemiptera, Miridae, Phylinae, *Acorrhinium*, new species, Iran.

1 Introduction

The genus *Acorrhinium* is recognized to contain a group of species with projecting spiniform frons in Halodapini, and was erected for one Turkish species, *A. conspersus* Noualhier, 1895, which is the type species of the genus. Distant (1904, 1909) reported four new species, three of which were collected from India and Sri Lanka, and one from Australia. He placed all four species in the genus *Armachanus* Distant, 1904, which was synonymized by Carvalho (1952) with *Acorrhinium*.

Poppius (1913, 1914) described two genera *Lutheriella* and *Ectmetocranum*, which contained single species, *L. oecophylloides* and *E. formicarium* respectively. Carvalho (1952) synonymized *Ectmetocranum* with *Acorrhinium* on the basis of the spiniform frons and the male genitalia. Schuh (1984) mentioned that Poppius (1913) gave no indication as to the possible relationship of *Lutheriella*, which should be a synonym of *Acorrhinium* according to the examination of the holotype.

Odhiambo (1959) reported two new species *A. acutum* and *A. hebes* from Kenya. Schuh (1974) described six new species of *Acorrhinium* according to the specimens collected from South Africa and synonymized the genus *Cinnamus* Distant with *Acorrhinium* Noualhier. Schuh (1984) reviewed the *Acorrhinium* and described two new species in his comprehensive work on the Phylinae of the Indo-Pacific. Linnavuori and Al-Safadi (1993) described two new species *A. elegans* and *A. minutissimus* from Yemen. Zhang & Liu (2010) described two new species of *Acorrhinium* from China. Up to now, 28 species have been recorded in the world.

In this paper, one new species of the genus *Acorrhinium* from Iran is described. The digital habitus photograph and male genitalia are given.

2 Materials and Methods

All genitalic illustrations were made from temporary slide mounts in lactophenol, using an Olympus SZ-ST microscope. The dorsal view photograph was made with a Nikon SMZ1000 apparatus. The type specimen is deposited in Institute of Entomology, Nankai University, Tianjin, China.

3 Taxonomy

Acorrhinium rufimaculatum sp. nov. (Figs 1–6)

Diagnosis. Recognized by the elongate and parallel-side body appearance, the triangular spiniform frons, the extremely long antenna, the robust, protuberant and nearly vertical clypeus, the longitudinal sulcus on vertex reaching the posterior margin of vertex, the almost black-brown pronotum with an erect, short simple setae respectively on each anterolateral angle, the deep brown coloration of dorsum mottled with many irregular pale spots, the distinctly declined cuneus with a striking red spot, and the male genitalia; this species could be distinguished from its congeners by the extremely long and twisted vesica. The mottled coloration of dorsum and shape of left paramere are similar to those of *A. inexpectatum* (Josifov), but could be separated from the later by the extremely long antenna and shape of vesica.

Male (Fig. 1). Macropterous, median-sized.

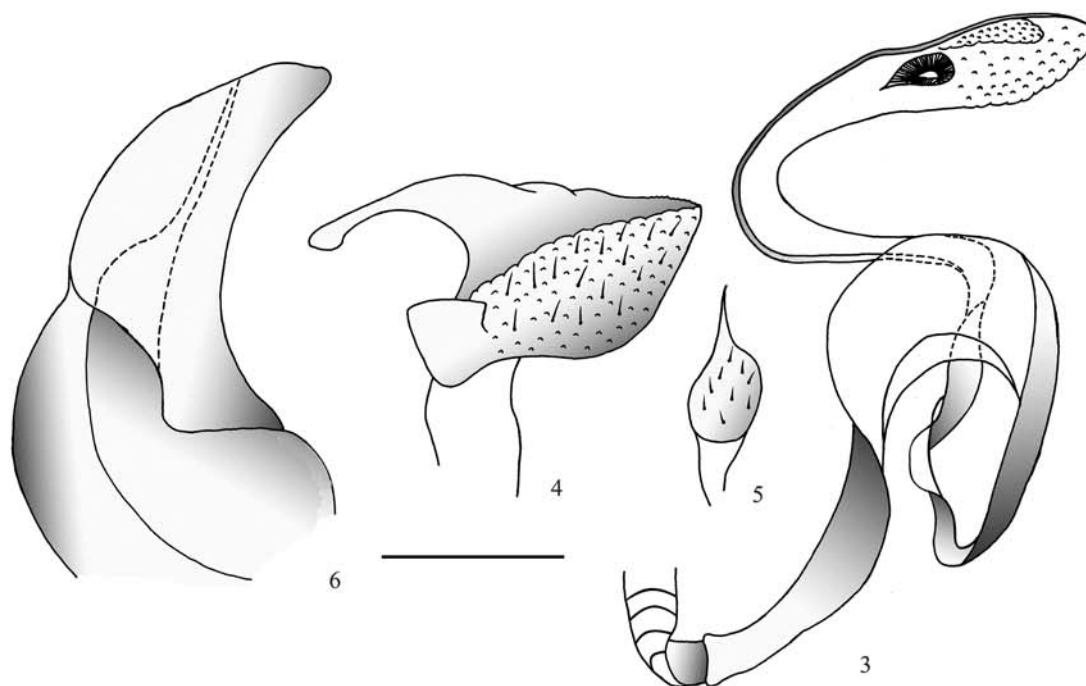
Coloration. Body generally deep brown or black-brown, mottled with many irregular pale spots; vertex, spiniform frons and clypeus dark brown, mandibular plate reddish brown and maxillary plate yellow-brown; labium yellow-brown with segment IV weakly darkened; buccula yellow; antennal segment I and II dark brown, segment III and IV reddish brown with the apical and distal joints dirty yellow; clavus with transverse pale strap mesially; cuneus dark brown with a rounded red spot basally; membrane light fumose; legs and abdomen dark brown.

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Figs 1 – 2. *Acrorrhinium rufimaculatum* sp. nov. 1. Male habitus view. 2. Lateral view.



Figs 3 – 6. Male genitalia. 3. Vesica. 4. Left paramere. 5. Right paramere. 6. Phallosome. Scale bar = 0.1 mm.

Vestiture. Dorsum covered with rather short, sparse, declined and weakly shining simple setae; abdomen covered with extremely sparse simple setae.

Head (Figs 1 – 2). Rounded in dorsal view; vertex smooth, weakly convex, mesially with a complete longitudinal sulcus, posterior margin of vertex necklike, weakly convex; spiniform frons triangular, distally weakly curved and tapering; clypeus humped, almost vertical; mandibular plate small, weakly

rounded, maxillary plate smooth, elongate; buccula distinctly elongate and slender; labium reaching abdominal segment IV; antenna slender, cylindrical, extremely long, almost subequal to the length of body, antennal segment I relatively long, not enlarged, segment III weakly less than 1/2 length of segment II, segment IV subequal to 2/3 length of segment III; eyes enlarged, protuberant laterally, kidney-shape in lateral view. **Thorax.** Pronotum trapeziform, declined

anteriorly, anterior and posterior lobes finely demarcated, collar thick, calli slightly convex; mesoscutum exposed broad, equal to 2/3 length of scutellum, lateral margin declined; scutellum triangular, weakly convex mesially; hemelytron elongate, exterior margin almost straight, clavus not obviously elevated along the claval commissure; cuneus distinctly declined, broadly triangular; veins of membrane indistinct; femora stout and weakly flattened, tibiae cylindrical and straight, with two rows of dark brown short teeth; length of tarsal segment I and II weakly less than that of segment III. Abdomen. Elongate and cylindrical, basally without constricted.

Male genitalia (Figs 3–6). Vesica extremely long and twisted with distinctive shape of apical membrane, secondary gonopore well developed, situated near apex of vesica (Fig. 3); left paramere boat-shaped, hypophysis elongate, sensory lobe enlarged, blunt apically (Fig. 4); right paramere extremely small, leaflike (Fig. 5); phallosome enlarged, distinctly curved (Fig. 6).

Measure (mm). Body length 3.88, width 1.38; head length 0.44, width 0.81; eye width 0.31; length of antennal segments I : II : III : IV = 0.50 : 1.75 : 0.88 : 0.50; pronotum length 0.31, width 1.13; scutellum length 0.75, basal width 0.81; embolium length 1.94; cuneus length 0.44, basal width 0.63.

Female. Unknown.

Holotype male. Iran, Loc. Rafsanjan, 20 May 2008, M. R. Mehrnejad leg.

Etymology. Named for the cuneus with a striking red spot.

Distribution. Iran.

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角额盲蝽属一新种记述 (半翅目, 盲蝽科, 叶盲蝽亚科)

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摘要 记述了采自伊朗的角额盲蝽属1新种, 红斑角额盲蝽 *Acrorrhinium rufimaculatum* sp. nov.。成虫雄虫彩色照片、头侧面观及雄性外生殖器特征图一并给出。新种模式标本保存在南开大学昆虫标本室。

关键词 半翅目, 盲蝽科, 叶盲蝽亚科, 角额盲蝽属, 新种, 伊朗。
中图分类号 Q969.357.6

正模 ♂, 伊朗, Loc. Rafsanjan, 2008-05-20, M. R. Mehrnejad 采。

词源: 新种种名源自楔片显著红色圆斑。

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